

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

COMPLETE LISTING OF CLAIMS:

Claims 1-23 : (Canceled)

Claim 24 : (New) A method of controlling signal launch power of at least one optical signal in an optical communication network, comprising the step of: pre-distorting the launch power of the at least one optical signal in accordance with a known value of a bandwidth of a modulation signal used to modulate the at least one optical signal.

Claim 25 : (New) The method as claimed in claim 24, wherein the pre-distorting step is performed by pre-distorting the launch power of the at least one optical signal in accordance with a known value of expected noise on a signal path of the at least one optical signal.

Claim 26 : (New) The method as claimed in claim 25, wherein the known values are provided by management systems of the optical communication network.

Claim 27 : (New) The method as claimed in claim 25, wherein the known values are provided by a network and connectivity information unit.

Claim 28 : (New) The method as claimed in claim 25, wherein the known values are supplied by a supervisory channel.

Claim 29 : (New) The method as claimed in claim 24, wherein the at least one pre-distorted optical signal is passed through an optical amplifier.

Claim 30 : (New) The method as claimed in claim 29, wherein the pre-distorting step is performed by using a comparator, which compares a signal derived from an

output of the optical amplifier with a reference signal dependent on the known value of the bandwidth of the modulation signal used to modulate the at least one optical signal.

Claim 31 : (New) The method as claimed in claim 25, wherein the known value for expected noise on the signal path of the at least one optical signal is derived from a knowledge of a number and a type of an optical amplifier through which the at least one optical signal will pass.

Claim 32 : (New) The method as claimed in claim 24, wherein the optical communication network carries an n channel multiplex, and wherein the pre-distorting step is performed by an optical amplifier.

Claim 33 : (New) The method as claimed in claim 24, wherein the launch power of the at least one optical signal with an associated modulation signal of a higher bandwidth is pre-distorted to increase a signal level of the at least one optical signal compared to an optical signal with an associated modulation signal of a lower bandwidth.

Claim 34 : (New) The method as claimed in claim 25, wherein the launch power of the at least one optical signal is pre-distorted to increase a signal level of the at least one optical signal when the expected noise on the signal path of the at least one optical signal through the network is higher compared to an optical signal having a lower than expected noise on its signal path through the network.

Claim 35 : (New) An apparatus for controlling signal launch power of at least one optical signal in an optical communication network, comprising:

a) a launcher for launching the at least one optical signal onto the network; and

b) means for pre-distorting the launch power of the at least one optical signal in accordance with a known value of a bandwidth of a modulation signal used to modulate the at least one optical signal.

Claim 36 : (New) The method as claimed in claim 35, wherein the means for pre-distorting the launch power of the at least one optical signal is also operative for pre-distorting the launch power of the at least one optical signal in accordance with a known value of expected noise on a signal path of the at least one optical signal.

Claim 37 : (New) The apparatus as claimed in claim 36, wherein the known values are provided in use by management systems of the optical communication network.

Claim 38 : (New) The apparatus as claimed in claim 37, wherein the known values are provided by a network and connectivity information unit.

Claim 39 : (New) The apparatus as claimed in claim 37, wherein the known values are supplied by a supervisory channel.

Claim 40 : (New) The apparatus as claimed in claim 35, including an optical amplifier through which at least one pre-distorted optical signal is passed in use.

Claim 41 : (New) The apparatus as claimed in claim 40, wherein the pre-distorting means includes a comparator for comparing a signal derived from an output of the optical of the optical amplifier with a reference signal dependent on the known value of the bandwidth of the modulation signal used to modulate at least one optical signal.

Claim 42 : (New) The apparatus as claimed in claim 36, wherein the expected noise is derived from a number and a type of optical amplifier through which the at least one optical signal will pass in the optical communication network.

Claim 43 : (New) The apparatus as claimed in claim 35, wherein the optical communication network is adapted to carry an n channel multiplex, and wherein the launch power of the at least one optical signal is pre-distorted by an optical amplifier in use.

Claim 44 : (New) The apparatus as claimed in claim 35, wherein the pre-distorting means is operative for increasing a signal level of the at least one optical signal with an associated modulation signal of a higher bandwidth compared to an optical signal with an associated modulation signal of a lower bandwidth.

Claim 45 : (New) The apparatus as claimed in claim 36, wherein the pre-distorting means is operative for increasing a signal level of the at least one optical signal having a higher than expected noise on its signal path through the network compared to an optical signal having a lower than expected noise on its signal path through the network.

Claim 46 : (New) The apparatus as claimed in claim 35, wherein the apparatus is an add/drop node.